Sequence Listing

<110> Zhang, Jingwu Z.
Ho, Walter Kowk Keung
Zhang, Dongqing
Sun, Wei

<120> T Cell Receptor CDR3 Sequence and Methods for Detecting and Treating Rheumatoid Arthritis

<130> 057186.000003

<140> US 10/612,468
<141> 2003-07-02

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TCR beta-chain BV14 in patients with RA

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TCR beta-chain BV16 in patients with RA

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Vβ14 of T cell receptors

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Ala Gly Pro Leu Glu Ala Gln Val Thr Gln Asn Pro Arg Tyr Leu
20 25 30
Ile Thr Val Thr Gly Lys Lys Leu Thr Val Thr Cys Ser Gln Asn
35 40 45
Met Asn His Glu Tyr Met Ser Trp Tyr Arg Gln Asp Pro Gly Leu
50 55 60
Gly Leu Arg Gln Ile Tyr Tyr Ser Met Asn Val Glu Val Thr Asp
65 70 75
Lys Gly Asp Val Pro Glu Gly Tyr Lys Val Ser Arg Lys Glu Lys
80 85 90
Arg Asn Phe Pro Leu Ile Leu Glu Ser Pro Ser Pro Asn Gln Thr
95 100 105
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Asp Asn Leu Tyr Trp Tyr Arg Arg Val Met Gly Lys Glu Ile Lys
35 40 45
Phe Leu Leu His Phe Val Lys Glu Ser Lys Gln Asp Glu Ser Gly
50 55 60
Met Pro Asn Asn Arg Phe Leu Ala Glu Arg Thr Gly Gly Thr Tyr
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from ST specimen of RA patients

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from ST specimen of RA patients

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Phe Phe Gly Pro Gly
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<210> 78
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from ST specimen of RA patients

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from ST specimen of RA patient

<400> 79

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Phe Phe Gly Pro Gly
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from ST specimen of RA patients

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Phe Phe Gly Pro Gly
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<400> 82

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Phe Phe Gly Pro Gly
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<210> 84
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from ST specimen of RA patients

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from ST specimen of RA patient

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Phe Phe Gly Pro Gly
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Phe Phe Gly Pro Gly
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<210> 92
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from ST specimen of RA patients

<400> 92

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<210> 93
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
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from ST specimen of RA patient

<400> 93

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Phe Phe Gly Pro Gly
20

<210> 94
<211> 60
<212> DNA
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from ST specimen of RA patients

<400> 94

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<210> 95
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
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from ST specimen of RA patient

<400> 95

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Phe Phe Gly Pro Gly
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<210> 96
<211> 60
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from ST specimen of RA patients

<400> 96

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<210> 97
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
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from ST specimen of RA patient

<400> 97

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Phe Phe Gly Pro Gly
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<210> 98
<211> 60
<212> DNA
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<220>
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from ST specimen of RA patients

<400> 98

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<210> 99
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>
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from ST specimen of RA patient

<400> 99

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Gly Gln Gly

<210> 100
<211> 54
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from ST specimen of RA patients

<400> 100

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<210> 101
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<220>
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from ST specimen of RA patient

<400> 101

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5 10 15
Gly Gln Gly

<210> 102
<211> 54
<212> DNA
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<220>
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from ST specimen of RA patients

<400> 102

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<210> 103
<211> 18

<212> PRT
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<220>
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from ST specimen of RA patient

<400> 103

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5 10 15
Gly Gln Gly

<210> 104
<211> 54
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<220>
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from ST specimen of RA patients

<400> 104

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<210> 105
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>
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from ST specimen of RA patient

<400> 105

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5 10 15
Gly Gln Gly

<210> 106
<211> 54
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from ST specimen of RA patients

<400> 106

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<210> 107
<211> 18
<212> PRT
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<220>
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from ST specimen of RA patient

<400> 107

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5 10 15
Gly Gln Gly

<210> 108
<211> 54
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<220>
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from ST specimen of RA patients

<400> 108

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<210> 109
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<220>
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<223> CDR3 amino acid sequence of BV16 clonotype derived from ST specimen of RA patient

<400> 109

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5 10 15
Gly Gln Gly

<210> 110
<211> 54
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<400> 110

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<210> 111
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<220>
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<400> 111

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5 10 15
Gly Gln Gly

<210> 112
<211> 54
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<220>
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from ST specimen of RA patients

<400> 112

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<210> 113
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
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from ST specimen of RA patients

<400> 113

Tyr Phe Cys Ala Ser Ser Pro Thr Arg Asp Arg Gly Asn Glu Gln
5 10 15
Phe Phe Gly Pro Gly
20

<210> 114
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
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from ST specimen of RA patients

<400> 114

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gga 63

<210> 115
<211> 22
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived

from ST specimen of RA patients

<400> 115

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20

<210> 116
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
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from ST specimen of RA patients

<400> 116

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gga 63

<210> 117
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived

from ST specimen of RA patients

<400> 117

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5 10 15
Phe Phe Gly Pro Gly
20

<210> 118
<211> 63
<212> DNA
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from ST specimen of RA patients

<400> 118

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gga 63

<210> 119
<211> 21
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived

from ST specimen of RA patients

<400> 119

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5 10 15
Gln Phe Phe Gly Pro Gly
20

<210> 120
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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from ST specimen of RA patients

<400> 120

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<210> 121
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
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from ST specimen of RA patients

<400> 121

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5 10 15
Phe Phe Gly Pro Gly
20

<210> 122
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
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from ST specimen of RA patients

<400> 122

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gga 63

<210> 123
<211> 21
<212> PRT
<213> *Homo sapiens*

<220>
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from ST specimen of RA patients

<400> 123

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5 10 15
Gln Phe Phe Gly Pro Gly
20

<210> 124
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<221> CDS
<223> CDR3 nucleic acid sequence of BV14 clonotype derived

from ST specimen of RA patients

<400> 124

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<210> 125
<211> 19
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 125

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5 10 15
Phe Gly Pro Gly

<210> 126
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> CDS
<223> CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 126

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<210> 127
<211> 20
<212> PRT
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<220>
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<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 127

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Tyr Phe Gly Pro Gly
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<210> 128
<211> 60
<212> DNA
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<220>
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<400> 128

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<210> 129
<211> 20
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<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 129

Tyr Phe Cys Ala Ser Ser Ser Gly Gly Ser Leu Phe Tyr Glu Gln
5 10 15
Tyr Phe Gly Pro Gly
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<210> 130
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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<400> 130

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<210> 131
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<213> *Homo sapiens*

<220>
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<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 131

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5 10 15
Tyr Phe Gly Pro Gly
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<210> 132
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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<400> 132

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<210> 133
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<212> PRT
<213> *Homo sapiens*

<220>
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<400> 133

Tyr Phe Cys Ala Ser Ser Ser Gly Gly Ser Leu Phe Tyr Glu Gln
5 10 15
Tyr Phe Gly Pro Gly
20

<210> 134
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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<400> 134

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<210> 135
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
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<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 135

Tyr Phe Cys Ala Ser Ser Pro Ser Ile Ser Ser His Tyr Glu Gln
5 10 15
Tyr Phe Gly Pro Gly
20

<210> 136
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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<223> CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 136

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<210> 137
<211> 19
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 137

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5 10 15
Phe Gly Pro Gly

<210> 138
<211> 57
<212> DNA
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<220>
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<223> CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 138

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<210> 139
<211> 19
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 139

Tyr Phe Cys Ala Ser Ser Leu Ser Ser Thr Gly Arg Glu Gln Tyr
5 10 15
Phe Gly Pro Gly

<210> 140
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
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<400> 140

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<210> 141
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 141

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5 10 15
Tyr Phe Gly Pro Gly
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<210> 142
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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<400> 142

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<210> 143
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 143

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5 10 15
Tyr Phe Gly Pro Gly
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<210> 144
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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from ST specimen of RA patients

<400> 144

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<210> 145
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
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<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 145

Tyr Phe Cys Ala Ser Ser Phe Gly Thr Val Leu Ser Tyr Glu Gln
5 10 15
Tyr Phe Gly Pro Gly
20

<210> 146
<211> 60
<212> DNA
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<220>
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<400> 146

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<210> 147
<211> 20
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<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 147

Tyr Phe Cys Ala Ser Ser Pro Arg Leu Ala Gly Asp Lys Glu Gln

5 10 15
Tyr Phe Gly Pro Gly
20

<210> 148
<211> 61
<212> DNA
<213> Artificial Sequence

<220>
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<400> 148

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<210> 149
<211> 20
<212> PRT
<213> *Homo sapiens*

<220>
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<400> 149

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5 10 15
Tyr Phe Gly Pro Gly
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<210> 150
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
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<400> 150

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<210> 151
<211> 19
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
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<400> 151

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5 10 15
Leu Gly Ser Gly

<210> 152
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
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<400> 152

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<210> 153
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 153

Tyr Phe Cys Ala Ser Ser Leu Ser Gln Glu Thr Glu Ala Phe Phe
5 10 15
Gly Gln Gly

<210> 154
<211> 53
<212> DNA

<213> Artificial Sequence

<220>
<221> CDS
<223> CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 154

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<210> 155
<211> 19
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 155

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5 10 15
Phe Gly Ser Gly

<210> 156
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
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<223> CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 156

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<210> 157
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>
<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived

from ST specimen of RA patients

<400> 157

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5 10 15
Gly Gln Gly

<210> 158
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
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<223> CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 158

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<210> 159
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>
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<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 159

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5 10 15
Gly Gln Gly

<210> 160
<211> 53
<212> DNA
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<220>
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<400> 160

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<210> 161
<211> 18
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<213> *Homo sapiens*

<220>
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<400> 161

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5 10 15
Gly Gln Gly

<210> 162
<211> 53
<212> DNA
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<220>
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<400> 162

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<210> 163
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>
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<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 163

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5 10 15
Gly Gln Gly

<210> 164
<211> 54
<212> DNA
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<220>
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<400> 164

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<210> 165
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>
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<400> 165

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5 10 15
Gly Gln Gly

<210> 166
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
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<400> 166

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<210> 167
<211> 18
<212> PRT
<213> *Homo sapiens*

<220>

<221> Domain
<223> CDR3 amino acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 167

Tyr Phe Cys Ala Ser Ser Ser Leu Ala Thr Ala Glu Ala Phe Phe
5 10 15
Gly Gln Gly

<210> 168
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> CDS
<223> CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of RA patients

<400> 168

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